

551.482

MEAN LAKE LEVELS DURING FEBRUARY, 1921.

By UNITED STATES LAKE SURVEY.

[Detroit, Mich., Mar. 3, 1921.]

The following data are reported in the "Notice to Mariners" of the above date:

Data.	Lakes.*			
	Superior.	Michigan and Huron.	Erie.	Ontario.
Mean level during February, 1921:				
Above mean sea level at New York.....	Feet. 601.76	Feet. 579.84	Feet. 571.85	Feet. 245.46
Above or below—				
Mean stage of January, 1921.....	—0.32	—0.08	—0.14	—0.08
Mean stage of February, 1920.....	—0.14	—0.14	+1.07	+0.45
Average stage for February, last 10 years.....	—0.07	—0.11	+0.29	—0.01
Highest recorded February stage.....	—0.72	—2.88	—1.90	—2.21
Lowest recorded February stage.....	+1.00	+0.68	+1.22	+1.63
Average relation of the February level to:				
January level.....		0.00	—0.10	+0.10
March level.....		—0.10	—0.10	—0.10

* Lake St. Clair's level: In February, 573.52 feet.

MEAN LAKE LEVELS DURING MARCH, 1921.

By UNITED STATES LAKE SURVEY.

[Detroit, Mich., Apr. 4, 1921.]

The following data are reported in the "Notice to Mariners" of the above date:

Data.	Lakes.*			
	Superior.	Michigan and Huron.	Erie.	Ontario.
Mean level during March, 1921:				
Above mean sea level at New York.....	Feet. 601.55	Feet. 579.90	Feet. 572.14	Feet. 245.79
Above or below—				
Mean stage of.....	—0.21	+0.06	+0.29	+0.33
Do.....	—0.33	—0.19	+1.23	+0.74
Average stage for March, last 10 years.....	—0.13	—0.10	+0.47	+0.19
Highest recorded stage.....	—0.73	—3.05	—1.71	—2.02
Lowest recorded stage.....	+0.89	+0.79	+1.31	+1.49
Average relation of the March level to:				
February level.....		+0.10	+0.10	+0.10
April level.....		—0.30	—0.70	—0.70

* Lake St. Clair's level: In March, 574.74 feet.

MEAN LAKE LEVELS DURING APRIL, 1921.

By UNITED STATES LAKE SURVEY.

[Detroit, Mich., May 4, 1921.]

The following data are reported in the "Notice to Mariners" of the above date:

Data.	Lakes.*			
	Superior.	Michigan and Huron.	Erie.	Ontario.
Mean level during April, 1921:				
Above mean sea level at New York.....	Feet. 601.69	Feet. 580.34	Feet. 572.79	Feet. 246.38
Above or below—				
Mean stage of March, 1921.....	+0.14	+0.44	+0.67	+0.59
Mean stage of April, 1920.....	—0.52	—0.20	+1.17	+0.83
Average stage for April, last 10 years.....	—0.01	+0.05	+0.44	+0.08
Highest recorded April stage.....	—1.00	—2.89	—1.39	—2.05
Lowest recorded April stage.....	+1.15	+1.12	+1.53	+1.54
Average relation of the April level to:				
March level.....		+0.30	+0.70	+0.70
May level.....		—0.30	—0.40	—0.30

* Lake St. Clair's level: In April, 575.41 feet.

EFFECT OF WEATHER ON CROPS AND FARMING OPERATIONS, APRIL, 1921.

By J. WARREN SMITH, Meteorologist.

The weather during April was mostly unfavorable for farming operations. While the moisture was sufficient generally, except in the Southeast and Southwest, cool waves were frequent and there was too much rainfall in many Central and Southern States to permit of satisfactory progress in spring work. Frosts and freezing temperatures on several occasions during the month extended considerably the area in which severe damage was done to fruit by the cold wave near the close of March. Considerable damage was done to fruit in California and Oregon during the week ending April 12, while heavy damage was reported from the former State during that ending the 19th.

The ample soil moisture in most sections of the country permitted of satisfactory development of the hardier grains and grasses, although growth was checked by the frequent cool waves. It was too cool for the proper growth of corn during much of the month in the Southern States, and there was considerable delay in the preparation of the soil for this crop by reason of frequent rains and wet soil in most central districts. At the close of the month corn planting was behind the average in the central Great Plains States and in the Mississippi and Ohio Valleys.

Cotton planting made fairly good progress in the more Eastern States of the belt where precipitation was light, but this work was greatly hindered in the central and in much of the western portions of the belt by frequent rains. Germination was slow and unsatisfactory in most sections of the belt and considerable replanting was necessary. From 6 to 12 inches of rain occurred during the month in much of the belt.

There was sufficient moisture for the growth of grass on meadows, pastures, and ranges, except in the Southeastern and Southwestern States, but it was too cool for alfalfa in the Northwest. Stock continued mostly in satisfactory condition, except in parts of New Mexico and Arizona, where the range was very poor on account of drought, and some loss of stock was reported. There was considerable precipitation in the central and northern Rocky Mountain sections, which was beneficial to ranges in that area, but the cold weather and heavy snows in the central Rocky Mountain districts were rather unfavorable for stock, although no serious losses were reported.